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WATER ACT 1989**Section 51****GROUNDWATER LICENCE No 2007440***(Licence to take and use groundwater)***Objective**

The objective of this licence is to allow the efficient depressurising of the Loy Yang open cut mine whilst minimising adverse impacts on the Gippsland Groundwater Basin.

Definitions

In this licence-

"Mining Licence" means a mining licence issued under the provisions of the *Electricity Industry Act 1993*.

"Approved work plan" means the Mining Licence work plan applicable to Mining Licence No 5189.

"Regional monitoring program" means the monitoring program described in Attachment A of the approved work plan.

"Rehabilitation plan" means a rehabilitation plan approved under the provisions of the *Electricity Industry Act 1993*.

Preamble

The extraction of groundwater for the purpose of achieving safe and stable conditions in the Loy Yang open cut mine is authorised under this Groundwater Licence issued by the Minister responsible for the *Water Act, 1989*. The administration of the licence may be delegated by the Minister to the Gippsland and Southern Rural Water Authority

The extraction of groundwater at mine sites in the Latrobe Valley results in a regional cone of depression of the groundwater and in ground subsidence.

The monitoring and reporting of regional groundwater and land level trends is to be carried out by the licensee as part of the approved work plan under the Mining Licence.

The Minister or his delegate may set annual charges under this licence to recover the costs incurred in:

- ensuring compliance with licence conditions;
- assessing and reviewing the regional monitoring program; and
- managing and administering the licence.

Licence Authorisation

Loy Yang Power Ltd of Bartons Lane TRARALGON 3844 is authorised to take and use groundwater subject to the following conditions:

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1. This licence is valid for a period of thirty years from 1 September 1996
2. The licensee is authorised to take and use groundwater to facilitate mining for coal and generation of electrical energy and purposes incidental thereto.
3. The licensee is authorised to extract groundwater from the aquifers at quantities and during the times specified in the First Schedule or on application by the licensee such other quantities and during such other times as from time to time approved by the Minister or his delegate.
4. The licensee may vary the maximum monthly rate of extraction from any particular aquifer or the maximum annual volume to be extracted from any particular aquifer provided that the total monthly rate of extraction and the total annual volume from all aquifers is not exceeded and shall report at monthly intervals such variations as they occur to the Minister or his delegate.
5. The licensee may only take and use groundwater under this licence on the land with respect to which the licensee holds a mining licence for the Loy Yang Power mine. //
6. Annual fee at date of issue \$19,300.
7. The licensee shall pay annual charges for the forthcoming year due under the licence in quarterly installments or on an annual basis as agreed between the licensee and the Minister or his delegate.
8. The licensee shall meter all groundwater extractions and shall keep an accurate record of the quantity of groundwater taken or used under this licence and allow the Minister or his delegate to inspect this record during normal business hours and to provide a copy of such record to the Minister or his delegate within seven days of a notice given by post to the licensee at the address contained in this licence.
9. The licensee shall provide to the Minister or his delegate annually details of the location of each bore from which groundwater is extracted under this licence.
10. By the issue of this licence the Minister or his delegate in no way accepts any liability for injury to any party arising as a consequence of any adverse effects that may be deemed to have been caused by the extraction of groundwater under the licence.
11. The licensee shall compensate any person whose existing authorised use of water is adversely and materially affected by the taking of water under this licence. The compensation may be either financial or may be constituted by the making available of, or granting access to, water. If the licensee is unable to or unwilling to make compensation by the making available of or granting access to water in the quantities previously enjoyed by the person so affected then the amount of financial compensation payable

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shall be that as determined by a Valuer nominated by the President of the Victorian Division of The Australian Institute of Valuers and Land Economists (Inc)

12. The licensee shall undertake a regional monitoring program of the nature scope and extent as that previously undertaken by the State Electricity Commission of Victoria as detailed in the approved work plan and the information is to be provided on request to the Minister or his delegate and as required under the work plan. The details as required to be incorporated in the work plan are as set out in Attachment A to this licence and form part of the requirements under this licence until incorporated into the mining licence.
13. All information obtained from the regional monitoring program belongs to the generation companies, the State Electricity Commission of Victoria and the Minister jointly.
14. The licensee must maintain the existing data bases, and undertake additional work that may be required from time to time by the Minister or his delegate to maintain the effectiveness of the regional monitoring program.
15. If the licensee fails to provide the information required under condition 12 the Minister or his delegate may undertake any necessary work to obtain the information and recover the costs of such work from the licensee.
16. The regional monitoring program and any remedial measures must be incorporated in the approved work plan and the rehabilitation plan to the satisfaction of the Minister or his delegate.
17. The licensee shall comply with the provisions in its mining licence, approved work plan and the rehabilitation plan dealing with the regional monitoring program and remedial action.

Patrick J. McNamara
PATRICK JOHN McNAMARA
 MINISTER for AGRICULTURE and RESOURCES
 Date 9th May '97

This Licence is transferred to:

Horizon Energy Holdings Ltd
CMS Generation Horizon Energy Holdings Ltd
Horizon Energy Investment (No. 2) Pty Ltd
NRGenerating Holdings (No. 4) B.V.

of Bartons Lane TRARALGON 3844

Patrick J. McNamara
PATRICK JOHN McNAMARA
 MINISTER for AGRICULTURE and RESOURCES
 Date 9th May '97

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FIRST SCHEDULE

Year	M1B Aquifer		M2C Aquifer		Traralgon Fm Aquifer		Total Annual Volume ML
	ML/Month	Annual Volume ML	ML/Month	Annual volume ML	ML/Month	Annual Volume ML	
1996	50	600	231	2,775	572	6,860	10,235
1997	66	788	263	3,154	841	10,093	14,035
1998	92	1,104	263	3,154	841	10,093	14,350
1999	105	1,262	237	2,839	841	10,093	14,193
2000	105	1,262	237	2,839	920	11,039	15,139
2001	105	1,262	237	2,839	920	11,039	15,139
2002	105	1,262	210	2,535	920	11,039	14,824
2003	105	1,262	184	2,208	920	11,039	14,508
2004	105	1,262	184	2,208	920	11,039	14,508
2005	105	1,262	184	2,208	920	11,039	14,508
2006	105	1,262	184	2,208	920	11,039	14,508
2007	105	1,262	184	2,208	920	11,039	14,508
2008	105	1,262	184	2,208	1,156	13,877	17,347
2009	105	1,262	184	2,208	1,156	13,877	17,347
2010	105	1,262	184	2,208	1,156	13,877	17,347
2011	105	1,262	184	2,208	1,156	13,877	17,347
2012	105	1,262	184	2,208	1,377	16,527	19,996
2013	105	1,262	184	2,208	1,377	16,527	19,996
2014	105	1,262	184	2,208	1,377	16,527	19,996
2015	105	1,262	184	2,208	1,377	16,527	19,996
2016	105	1,262	184	2,208	1,377	16,527	19,996
2017	105	1,262	184	2,208	1,377	16,527	19,996
2018	105	1,262	184	2,208	1,377	16,527	19,996
2019	105	1,262	184	2,208	1,377	16,527	19,996
2020	110	1,325	184	2,208	1,314	15,770	19,302
2021	110	1,325	184	2,208	1,314	15,770	19,302
2022	110	1,325	184	2,208	1,314	15,770	19,302
2023	110	1,325	184	2,208	1,314	15,770	19,302
2024	110	1,325	184	2,208	1,314	15,770	19,302
2025	110	1,325	184	2,208	1,314	15,770	19,302

Attachment A**REGIONAL MONITORING PROGRAM
LATROBE VALLEY OPEN CUT COAL MINES****PREAMBLE**

These requirements are to form part of the Approved Work Plan for each of the three open cut coal mines at Morwell, Yallourn and Loy Yang under the provisions of the Mineral Resources Development Act 1990. They outline the obligations and requirements in respect to monitoring and predicting changes in regional groundwater levels and land levels associated with groundwater extraction from the mines.

Over the past 20 or so years the SECV has undertaken an extensive range of groundwater studies and investigations in the Latrobe Valley. Most importantly the work includes a regional groundwater monitoring network, regional land level surveys, and modelling to predict future changes in both groundwater levels and land levels as a result of mining operations. These programs continue to be carried out by Yallourn Energy Ltd., Hazelwood Power Corporation Ltd. and Loy Yang Power Ltd. The purpose of this attachment is to ensure the continuation of these regional monitoring and assessment programs.

The requirements specified in this attachment are directed at:

- maintaining an appropriate regional monitoring and assessment program;
- providing a mechanism to cooperatively adjust and refine the regional program to take account of:
 - results generated by the program;
 - changes in mining and depressurising activity;
 - emerging regional issues associated with depressurising activities;
 - advances in technology; and
- maintaining a cost effective program.

REGIONAL MONITORING PROGRAMS

1. A regional monitoring will be undertaken to record and ascertain the changes in groundwater levels and land levels. The programs shall include:-
 - Groundwater Monitoring;
 - Groundwater Modelling;
 - Land Level Surveying; and
 - Land Level Modelling.

2. For the purposes of this attachment, the region that shall be observed comprises the area bounded by the coordinates (AMG 436000E, 5742000N and 4250000E, 5754000N and 447000E, 5785500N and 521000E, 5801000N and 521000E, 5766000N and 476000E, 5754000N and 450000E, 5753000N) as shown on the attached plan.

Groundwater Monitoring

3. A groundwater monitoring network will be maintained in the region. Sufficient data will be collected to reliably monitor and predict regional groundwater levels and trends. Databases will be maintained to store and retrieve data related to those activities.
4. The bores included in the regional groundwater monitoring network together with the monitoring frequency are listed in Table A.
5. Standing water levels shall be measured according to standard operating procedures.
6. All data shall be verified before submitting for storage. Measurements shall be checked against previous measurements for that bore to detect anomalies such as:
 - incorrect recording of data;
 - the casing has collapsed or become perforated;
 - the screen or slots have become blocked.
7. The occurrence and cause of data anomalies shall be recorded and procedures instituted to prevent their recurrence.
8. Preventative maintenance shall be carried out to all surface fittings, bores shall be kept secure from illegal use, vandalism or contamination.
9. The structural condition of the bores shall be verified to ascertain if:-
 - the casing has collapsed or become perforated;
 - the screen or slots have become blocked.
10. All damaged or malfunctioning bores shall be repaired substituted or replaced.
11. All unwanted damaged or failed bores shall be decommissioned.
10. Bore condition and the works carried out to repair and replace bores shall be reported.
11. The regional potentiometric surface levels for the main aquifers shall be reported as contour maps.

Groundwater Modelling

12. Groundwater modelling of the region shall be performed to assist in predicting the effects of mine depressurising on regional groundwater levels.

13. Reports and results of modelling runs shall contain the predictions, previous predictions and actual values for groundwater extractions and potentiometric levels of groundwater.

Land Level Surveying

14. Land Level Surveys of the region shall be undertaken to determine the extent of land subsidence associated with mine depressurising.
15. Survey intervals and reports of survey results shall be carried out at no greater than 5 year intervals and more frequently where significant subsidence is being recorded. The next program will be completed by the year 1996.
16. Surveys shall be undertaken to not less than third order accuracy.

Land Level Modelling

17. Land level modelling of the region shall be performed to assist in predicting the effects of groundwater depressurisation on land subsidence.

ARRANGEMENTS FOR MANAGING THE PROGRAM

18. The conduct of the monitoring, modelling and reporting is to be reviewed by the Regional Monitoring Committee having representatives of Yallourn Energy Ltd., Hazelwood Power Corporation Ltd. and Loy Yang Power Ltd. the Department of Natural Resources and Environment and the Minister responsible for the *Water Act 1989* or his delegate. the Committee may make recommendations to the Minister responsible for the *Water Act 1989* or his delegate to amend the regional program in order to:

- maintain and/or enhance the regional monitoring and assessment program; and
- to adjust and refine the regional program to take account of :
 - results generated by the program;
 - changes in mining and depressurising activity;
 - emerging regional issues associated with depressurising activities;
 - advances in technology; and
- maintaining a cost effective program.

19. The program shall be consistent with the programs previously carried out by the State Electricity Commission of Victoria to determine the impacts of dewatering/depressurisation both on site and regionally and must be maintained to the satisfaction of the Inspector of Mines and the Minister responsible for the *Water Act 1989* or his delegate.

REPORTING

20. The licensee shall ensure that results of the regional monitoring program are reported to the Minister responsible for the *Water Act* 1989 or his delegate and the Environmental Review Committee annually and at any other times as required under the Groundwater Licence.
21. An annual report shall be prepared each September detailing:
 - a. the monitoring activity undertaken in the past year;
 - b. any amendments to the monitoring network;
 - c. any issues arising from the monitoring results including significant variations to predicted trends.
22. The annual report shall be made available to members of the public on request.
23. A comprehensive review shall occur at not less than at 5 yearly intervals, or more frequently if circumstances change or as deemed necessary by the Regional Monitoring Committee.
24. The comprehensive review shall include:
 - a. detailed analysis of measured regional groundwater levels and trends;
 - b. detailed analysis of measured regional land subsidence and trends;
 - c. contour maps of regional potentiometric surface levels for the main aquifers;
 - d. contour maps of regional land subsidence;
 - e. results from groundwater and land subsidence models;
 - f. based on the modelling, detailed predictions of future regional groundwater levels and land level trends;
 - g. any issues arising from the monitoring results including significant variations to previously predicted trends;
 - h. recommendations to amend and enhance the regional monitoring program;
 - i. where necessary, recommendations to manage regional issues resulting from mine depressurisation.
25. The licensee shall ensure that results of the comprehensive review are reported to the Minister responsible for the *Water Act* 1989 or his delegate.
26. The next review will be completed in 1996/97.

TABLE A

SEC Bore_id	Inter Seam-id	Seam-id	Aquifer	Easting	Northing	Transducer (m)	Monitored Interval from	Screen To (m)	Readings per year
51967	s01		Traralgon	470938	5770583		569.5	591.5	3
51979	s01		Traralgon	471063	5770578				3
52179	s02	bst	Basalt	459746	5760120		204	231	6
52204	s01	s219	Traralgon	465327	5762997		357	360	3
52310	s01		Morwell	469683	5772517		320	333	3
52472	s01		Morwell	466958	5769637		466.1	479	3
52477	s01		Traralgon	460442	5763006		171	177	3
52594	s01	s207	Traralgon	462932	5760496		110.7	123.8	3
52676	s01	s207	Traralgon	464241	5773325		672.5	692	3
52678	s01	s000	Basement	469681	5772509		694	694	3
52809	v01		Morwell	471137	5770563	449.8			3
52809	v02		Morwell	471137	5770563	430			3
52809	v03		Morwell	471137	5770563	405.3			3
52809	v04		Morwell	471137	5770563	392.6			3
52809	v05		Morwell	471137	5770563	350.1			3
52809	v06		Morwell	471137	5770563	319.9			3
52809	v07		Morwell	471137	5770563	289.7			3
52809	v08		Morwell	471137	5770563	255.7			3
52809	v09		Morwell	471137	5770563	245			3
52809	v10		Morwell	471137	5770563	230.8			3
52809	v11		Morwell	471137	5770563	205.1			3
52809	v12		Morwell	471137	5770563	180.1			3
52809	v13		Morwell	471137	5770563	149.9			3
52809	v14		Morwell	471137	5770563	125.2			3
52810	v04		Morwell	471153	5770560	595.3			3
52810	v05		Morwell	471153	5770560	587.3			3
52810	v06		Morwell	471153	5770560	580.3			3
52810	v07		Morwell	471153	5770560	543.8			3
52810	v08		Morwell	471153	5770560	507.8			3
52810	v09		Morwell	471153	5770560	480.3			3
52810	v10		Morwell	471153	5770560	458.3			3
52883	v01	s1000	Overburden	471070	5770575	69.8			3
52883	v02	s1000	Overburden	471070	5770575	36			3
52984	s01	s207	Traralgon	466677	5767549		350	353	3
52985	s01	s602	Morwell	466670	5767552		98	101	3
53038	s03	s304	Morwell	462234	5769287		327.2	0	3
53038	v01	s219	Traralgon	462234	5769287	414			3
53038	v02	s301s	Morwell	462234	5769287	387			3
53055	s01	s304	Morwell				384.5	387.5	3
53075	v01	s304	Morwell	463193	5768355	227.8			3
53075	v02	s408	Morwell	463193	5768355	177.8			3
53118	v01	s214	Traralgon	462399	5770406	542.6			3
53118	v02	s219	Traralgon	462399	5770406	523			3
53118	v03	s219	Traralgon	462399	5770406	508.7			3
53118	v04	s219	Traralgon	462399	5770406	499			3
53118	v05	s304	Morwell	462399	5770406	438.2			3
53118	v06	s306	Morwell	462399	5770406	454.4			3
53118	v07	s306	Morwell	462399	5770406	429.6			3
53118	v08	s402	Morwell	462399	5770406	413.3			3
53118	v09	s407	Morwell	462399	5770406	407.1			3
53118	v10	s500	Morwell	462399	5770406	399.6			3
53118	v11	s501	Morwell	462399	5770406	378.8			3
53118	v12	s600u	Morwell	462399	5770406	348.4			3
53118	v13	s700	Morwell	462399	5770406	336.7			3
53118	v14	s700	Morwell	462399	5770406	329			3
53118	v15	s700	Morwell	462399	5770406	303.2			3
53118	v16	s700	Morwell	462399	5770406	289			3
53118	v17	s701	Morwell	462399	5770406	263.1			3
53118	v18	s701	Morwell	462399	5770406	229.2			3
53118	v19	s800	Morwell	462399	5770406	208.4			3
53118	v20	s800	Morwell	462399	5770406	179			3
53119	v01	s801	Morwell	462411	5770403	136			3
53119	v02	s801	Morwell	462411	5770403	121.6			3

TABLE A

SEC, Bore_id	Inter Seam-id	Seam-id	Aquifer	Easting	Northing	Transducer (m)	Monitored Interval		Readings per year
							from	Screen To (m)	
53119	v03	s900	Morwell	462411	5770403	118.4			3
53119	v04	s900i	Morwell	462411	5770403	110.7			3
53119	v05	s900	Morwell	462411	5770403	90			3
53298	v01	s000	Basement	459683	5761763	224.8			3
53298	v02	s000	Basement	459683	5761763	184.4			3
53298	v03	s120	Basalt	459683	5761763	170.1			3
53298	v04	s120	Basalt	459683	5761763	138.2			3
53299	v01	s120	Basalt	459684	5761767	110			3
53299	v02	s207	Traralgon	459684	5761767	79.7			3
53299	v03	s207	Traralgon	459684	5761767	52.3			3
53299	v04	s1000	Overburden	459684	5761767	27.5			3
53352	v01	s000	Basement	460222	5764647	417.5			3
53352	v02	s000	Basement	460222	5764647	382.5			3
53353	s09	s500	Morwell	460216	5764636		40.2	43.2	3
53353	v01	s120	Basalt	460216	5764636	317.9			3
53353	v02	s120	Basalt	460216	5764636	280			3
53353	v03	s213	Traralgon	460216	5764636	236			3
53353	v04	s219	Traralgon	460216	5764636	213.7			3
53353	v05	s301s	Morwell	460216	5764636	181.4			3
53353	v06	s304	Morwell	460216	5764636	138.2			3
53353	v07	s306	Morwell	460216	5764636	87.2			3
53353	v08	s403	Morwell	460216	5764636	70			3
80445	v01	s304	Morwell	458006	5769795	579.9			3
80445	v02	s408	Morwell	458006	5769795	549.7			3
80445	v03	s500	Morwell	458006	5769795	525			3
80489	t01	s214	Traralgon	457978	5766531	589.5			3
80489	v02	s214	Traralgon	457978	5766531	589.5			3
80489	v03	s216	Traralgon	457978	5766531	576.6			3
80489	v04	s219	Traralgon	457978	5766531	568			3
80489	v05	s301s	Morwell	457978	5766531	532			3
80489	v06	s301s	Morwell	457978	5766531	517.7			3
80490	t02	s216	Traralgon	458524	5766257	329.7			3
80490	v01	s214	Traralgon	458524	5766257	341.4			3
80490	v03	s216	Traralgon	458524	5766257	329.7			3
80490	v04	s219	Traralgon	458524	5766257	320.9			3
80490	v05	s301s	Morwell	458524	5766257	287.1			3
80490	v06	s303s	Morwell	458524	5766257	256.6			3
80490	v07	s306	Morwell	458524	5766257	229.3			3
80490	v08	s306	Morwell	458524	5766257	214.6			3
80490	v09	s413	Morwell	458524	5766257	189.2			3
80491	t01	s207	Traralgon	460202	5768587	524.4			3
80491	v02	s207	Traralgon	460202	5768587	524.4			3
80491	v03	s214	Traralgon	460202	5768587	500.6			3
80491	v04	s215	Traralgon	460202	5768587	484.3			3
80491	v05	s219	Traralgon	460202	5768587	470			3
80491	v06	s306	Morwell	460202	5768587	416.5			3
80491	v07	s409	Morwell	460202	5768587	399.2			3
80491	v08	s501	Morwell	460202	5768587	365.3			3
80491	v09	s601	Morwell	460202	5768587	311.8			3
80491	v10	s701	Morwell	460202	5768587	225.6			3
80491	v11	s801	Morwell	460202	5768587	124.3			3
80491	v12	s900	Morwell	460202	5768587	81.8			3
80495	s01	s120	Basalt	458454	5761926		236	239	3
80496	s06	s1000	Overburden	458455	5761927		4.5	6	3
80496	v01	s207	Traralgon	458455	5761927	132.8			3
80496	v02	s219	Traralgon	458455	5761927	110			3
80496	v03	s301s	Morwell	458455	5761927	82.6			3
80496	v04	s1000	Overburden	458455	5761927	52.1			3
80496	v05	s1000	Overburden	458455	5761927	26.5			3
90323	s01	m2	Morwell	485442	5772772		211	214	6
90324	s01	m1b	Morwell	476082	5775537		377	384	6
90325	s01	m1b	Morwell	485681	5776745		344.5	351	6
90330	s01	m2c	Morwell	471964	5767940		478	481	6
90335	s01	m1b	Morwell	480370	5775990		398	401	6
90335	s02	m1b	Morwell	480370	5775990		385	388	6
90339	s01	t2	Traralgon	475590	5772706		632.5	652	6

TABLE A

SECC Bore_id	Inter Seam-id	Seam-id	Aquifer	Easting	Northing	Transducer (m)	Monitored Interval from	Screen To (m)	Readings per year
90340	v01	m2bco	Morwell	476111	5775526	545.4			6
90340	v03	m2c	Morwell	476111	5775526	496.4			6
90340	v04	m2s	Morwell	476111	5775526	475.7			6
90340	v05	m2co	Morwell	476111	5775526	451			6
90340	v06	m2co	Morwell	476111	5775526	443.3			6
90340	v07	m2co	Morwell	476111	5775526	429.1			6
90340	v08	m2co	Morwell	476111	5775526	405.4			6
90340	v09	m1bco	Morwell	476111	5775526	365			6
90340	v10	m1bintr	Morwell	476111	5775526	350.8			6
90340	v11	m1bintr	Morwell	476111	5775526	336.6			6
90340	v12	m1bco	Morwell	476111	5775526	300.3			6
90340	v13	m1a	Morwell	476111	5775526	275.6			6
90340	v14	m1aco	Morwell	476111	5775526	245.4			6
90340	v16	m1aco	Morwell	476111	5775526	184.4			6
90340	v17	yc0	Yallourn	476111	5775526	144.1			6
90340	v18	yc0	Yallourn	476111	5775526	129.9			6
90343	s01	m2	Morwell	480772	5770910		322	325	6
100093	s01	t2	Traralgon	496899	5770187		116	122.5	6
100094	s01	t2	Traralgon	498392	5768601		210.5	211.5	6
100094	s02	t2	Traralgon	498392	5768601		196.5	197.5	6
100096	s01	t2	Traralgon	498379	5768515		196.5	202.5	6
100097	s01	t2	Traralgon	496354	5766284		228	234	6
110032	s01	m1b	Morwell	463793	5781840		413	419	6
110034	s01	m2c	Morwell	468243	5784230		398	404.5	6
110036	s01	t2	Traralgon	471558	5778928		724.3	727.6	6
110037	s01	m2	Morwell	457565	5776816		574.5	578	6
110037	s02	m2	Morwell	457565	5776816		559	564.2	6
110038	s01	m2	Morwell	462310	5778090		529.5	533	6
110038	s02	m2c	Morwell	462310	5778090		500	506.5	6
110040	s01	m1b	Morwell	460886	5777315		317	323.5	6
110042	s01	t2	Traralgon	465399	5778355		585.5	595	6
110043	s01	hhf	Overburden	472688	5781606		604	617	6
130165	s01	m2a	Morwell	470581	5766114		254.2	257.2	6
130167	s01	t2	Traralgon	470769	5760829		172	173.9	6
130176	s01	t2	Traralgon	470515	5766073		516	517	6
130176	s02	t1	Traralgon	470515	5766073		502.5	503.5	6
130183	s01	t2	Traralgon	467810	5763371		457.5	463.5	6
130183	s02	t1	Traralgon	467810	5763371		420	423	6
130198	s01	m2c	Morwell	470132	5764486		70	73	6
130205	s01	t1	Traralgon	470056	5764145		158.5	170.5	6
130212	s01	t2	Traralgon	468075	5760566		157	163	6
180177	s01	t2	Traralgon	492005	5771760		172.5	179	6
180188	s01	t2	Traralgon	492016	5771729		196.9	199.1	6
180189	s01	t2	Traralgon	492019	5771710		196	202	6
180196	s01	t2	Traralgon	489766	5769550		312.5	319	6
180196	s01	t2	Traralgon	489982	5775902		298	304.5	6
180204	s01	m1a	Morwell	487808	5768055		351.4	354.5	6
180207	s01	t2	Traralgon	491927	5774950		218	301.5	6
180220	s01	t2	Traralgon	489043	5769555		301	311	6
180221	s01	t2	Traralgon	508376	5771796		190.2	196.2	6
190046	s01	t2	Traralgon	488413	5759579	329.4	335.2	6	6
210051	s01	t2	Traralgon	479470	5765095		349.6	369.4	6
220196	s01	t2	Traralgon	479488	5765101		352	355	6
220197	s01	t2	Traralgon	479488	5765101		339	340.5	6
220197	s02	t2	Traralgon	479488	5765101		330.5	332.5	6
220197	s03	t2	Traralgon	479488	5765101		326	327.5	6
220197	s04	t2	Traralgon	479488	5765101		321	323.5	6
220197	s05	t2	Traralgon	479488	5765101		426	439	6
240047	s01	m1bintr	Morwell	478998	5778765		568.8	577.8	6
240052	s01	m2s	Morwell	482842	5786326		398	401.5	6
440056	s01	m1bs	Morwell	486646	5780346		392	395	6
440056	s02	m1bs	Morwell	486646	5780346		526	535	6
440058	s01	m2cs	Morwell	484085	5779315		660	666	6
440341	s01	t1	Traralgon	490285	5787763		234	240	6
530024	s01	m2co	Morwell	471409	5792603		407	413	6
530025	s01	m2d	Morwell	467784	5787307		725	737	6
920007	s01	t2	Traralgon	508727	5764044				6

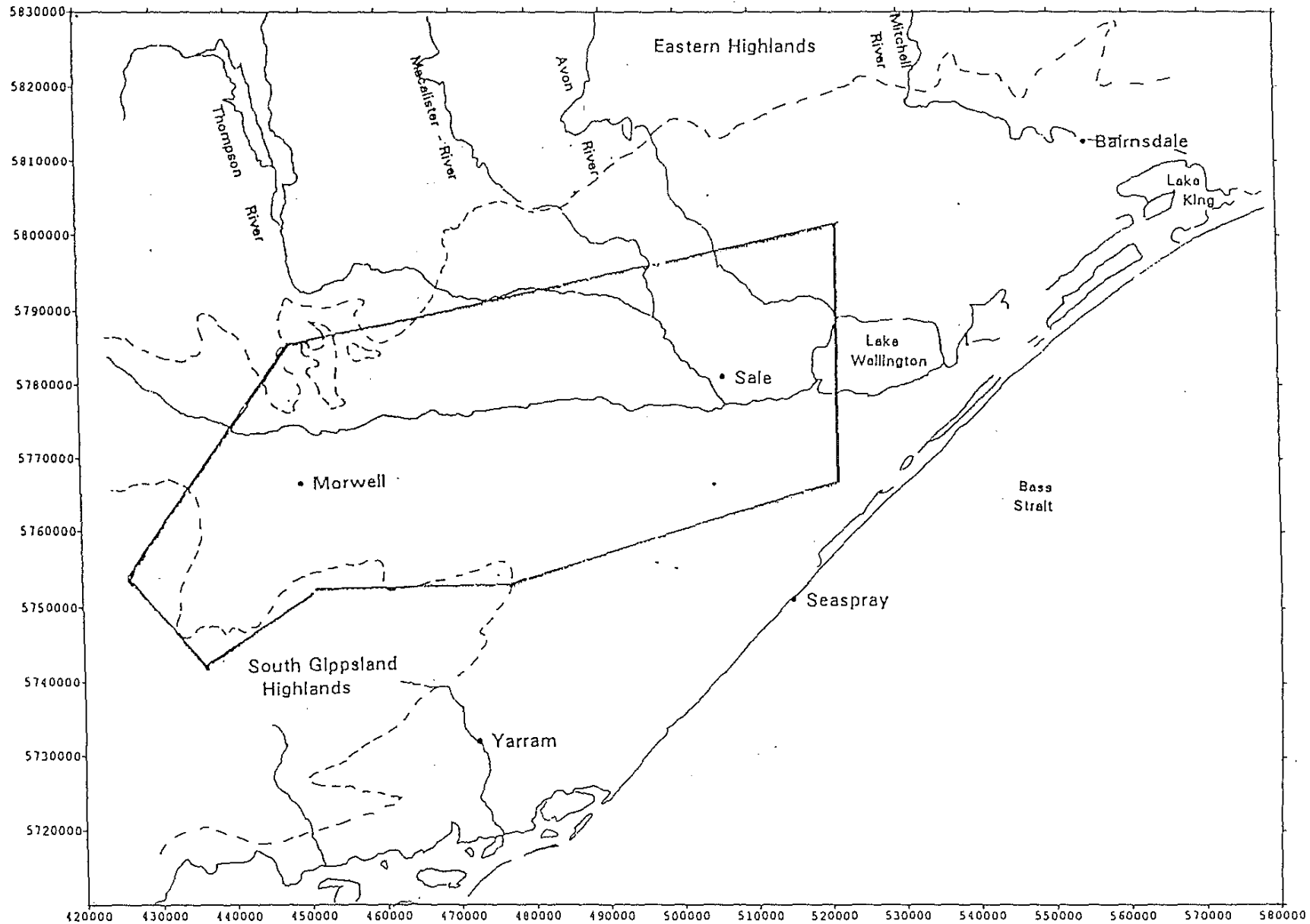
TABLE A

SEC Bore_id	Inter Seam-id	Seam-id	Aquifer	Easting	Northing	Transducer (m)	Monitored Interval from	Screen To (m)	Readings per year
40195	s01	m2s	Morwell	453719	5776453		456	459	12
40195	s02	m2s	Morwell	453719	5776453		449.5	452.5	12
40196	s01	m1b	Morwell	455344	5775761		331	334	12
40196	s02	m1b	Morwell	455344	5775761		309	315	12
10942	s01	m2	Morwell	451332	5773687				12
12034	s01	m2	Morwell	444974	5767679		297	301.9	3
12758	s01	m1b	Morwell	445713	5769485		250.5	263.5	12
13054	s01	m1b	Morwell	451007	5774117		324.5	344	12
13101	s01	m1s	Morwell	450630	5767792		606	613	12
13190	v01	m1b	Morwell	452103	5771191	460.4			12
13190	v02	m1b	Morwell	452103	5771191	439.6			12
13190	v03	m1b	Morwell	452103	5771191	412.3			12
13190	v04	m1a	Morwell	452103	5771191	385			12
13190	v05	m1aco	Morwell	452103	5771191	370.8			12
13190	v06	m1aco	Morwell	452103	5771191	358.2			12
13190	v07	m1aint	Morwell	452103	5771191	345.5			12
13190	v08	m1aint	Morwell	452103	5771191	327.2			12
13190	v09	m1aco	Morwell	452103	5771191	310			12
13282	v01	m1b	Morwell	448077	5769985	248.7			12
13282	v02	m1b	Morwell	448077	5769985	244.2			12
13282	v03	m1b	Morwell	448077	5769985	225.2			12
13282	v04	m1bco	Morwell	448077	5769985	210.2			12
13282	v05	m1bco	Morwell	448077	5769985	180.7			12
13282	v06		Morwell	448077	5769985	166.2			12
13282	v07	m1a	Morwell	448077	5769985	151.7			12
13282	v08		Morwell	448077	5769985	130.8			12
13282	v09	m1aco	Morwell	448077	5769985	109.7			12
13282	v10	yc	Yallourn	448077	5769985	84.7			12
22491	s01	m1s	Morwell	442511	5764494		87.5	89	12
23263	s01	m1a3	Morwell	441274	5764838		94.2	93.9	12
23263	s02	m1a2	Morwell	441274	5764838		91.1	91.4	12
23263	s03	m1a1	Morwell	441274	5764838		84.6	85.6	12
23270	s01	m1a3	Morwell	440655	5764395		45.7	46.3	12
23288	s01	m1a1	Morwell	440736	5763142		46.9	48.5	12
23369	s01	m1a1	Morwell	441501	5767590		143	144	12
23567	s01	a	Morwell	439942	5767338		124	130	12
23570	s01	bas	Basement	441817	5763673		181	187	12
23607	s01	m2a	Morwell	439335	5766552		83.6	90.1	12
23615	s01	a	Morwell	439463	5764961		59.1	66.1	12
23694	s01	m2a	Morwell	440805	5763059		65.6	66.6	12
23780	s01	m2a	Morwell	441500	5767578		187.5	194	12
24558	s01	m1a	Morwell	441178	5768165		164	170	12
24651	s01	b	Morwell	441440	5767969		170	173	12
24652	s01	a	Morwell	441526	5768866		192.5	195.5	12
61095	s01	m2	Morwell	443589	5763301		99.6	100.8	12
61320	s01	e	Morwell	446532	5761657		427.9	434	12
61333	s01	t1	Traralgon	450387	5764284		587.3	593.6	12
61348	s01	t1	Traralgon	449953	5762271		550.4	557.4	12
61502	s01	m1a	Morwell	443795	5759833		339	345	12
61502	s02	m1a	Morwell	443795	5759833		339	340.4	12
61631	v01	m1bco	Morwell	450379	5764307	294.4			12
61631	v02	m1bco	Morwell	450379	5764307	281.7			12
61631	v03	m1a	Morwell	450379	5764307	272.4			12
61631	v04	m1a	Morwell	450379	5764307	262.2			12
61631	v05	m1a	Morwell	450379	5764307	252			12
61631	v06	m1aco	Morwell	450379	5764307	234.8			12
61632	s01	t	Traralgon	450378	5764292		635.5	647.5	12
61691	v02		Morwell	447142	5758626	386.4			12
61691	v03	m2	Morwell	447142	5758626	361.7			12
61691	v04	m1	Morwell	447142	5758626	301.6			12
61691	v05		Overburden	447142	5758626	222.1			12
61719	s01	m2s	Morwell	449912	5759871		309	306	12
61726	s01	m2s	Morwell	448784	5757198		321	347	12
120122	s01	m2A	Morwell	442762	5756708		291	297.5	12
120122	s02	m2A	Morwell	442762	5756708		280	287	12
120135	s01	m2A	Morwell	440668	5756479		320	323	12

TABLE A

SEC Bore_id	Inter Seam-id	Seam-id	Aquifer	Easting	Northing	Transducer (m)	Monitoted Interval from	Screen To (m)	Readings per year
120141	p01	ob	Overburden	442169	5756799				12
120141	p02	ys	Yallourn	442169	5756799				12
120141	p03	ys	Yallourn	442169	5756799				12
120141	p04	m1bco	Morwell	442169	5756799				12
120141	p05	m1bco	Morwell	442169	5756799				12
120141	p06	m1a	Morwell	442169	5756799				12
120152	s01		Traralgon	000000			32.4	638.4	12
23726	s01	m2	Morwell	438701	5773468		85	194	12
23787	s01	m1a3	Morwell	438151	5773869		09.1	215.1	12
23788	s01	m2	Morwell	436100	5775669		96.5	98	12
23789	s01	m2	Morwell	437084	5774827		158.5	164.5	12
23799	s01	a	Morwell	439674	5772504		211.5	214.5	12
230034	s01	m2	Morwell	433329	5777233		52	55	12
230043	s01	m2	Morwell	430147	5776203		144	156	12
230049	s01	m2	Morwell				210	219	12
230055	s01	m2	Morwell				176	180	12

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Regional Monitoring Requirements
Latrobe Valley Open Cut Coal Mines
Boundary of Regional Programs

--- Boundary of Gippsland Groundwater basin
□ Boundary of regional programs

